

Amendments to the Specification

- 1) Please insert the following subtitle at page 1, below the title:

Background

- 2) Please insert the following subtitle and text at page 3, line 18:

Summary

The invention includes both methods and apparatus to achieve the desired results, as described, but is not limited to the various embodiments disclosed.

- 3) Please insert the following subtitle and text at page 4, line 5:

Brief Description of the Drawings

For a further understanding of the nature and objects for the present invention, reference should be made to the following detailed description, taken in conjunction with the accompanying drawings, in which like elements are given the same or analogous reference numbers and wherein:

- Figure 1 illustrates a schematic representation, according to one embodiment of the current invention, of a cryogenic air distillation column;
- Figure 2a illustrates a schematic representation, according to another embodiment of the current invention, of a cryogenic air distillation column; and
- Figure 2b illustrates a sectional view of the embodiment shown in Figure 2a.

- 4) Please insert the following subtitle after the above-inserted paragraphs:

Description of Preferred Embodiments

The invention is a method of treating a liquid bath containing at least 70 mol% oxygen collected in the bottom of a cryogenic distillation column or column element forming part of a system of columns that is used for the separation of air, in which said liquid bath is continuously boiled by means of at least a first reboiler made of aluminum, a portion of said oxygen-rich liquid bath is purged so as to prevent an excessive build-up of inflammable impurities in said bath, said purged portion is sent into at least a second reboiler, the oxygen boiled by said second reboiler is sent back into said cryogenic distillation column and a portion of the oxygen-rich liquid bath treated by said second reboiler is purged, characterized in that the second reboiler is, by its construction and/or its material, less inflammable than the first reboiler.

5) Please delete the text at page 6, lines 5 – 17.

6) Please replace the paragraph at page 7, line 6, with the following:

According to the invention, this liquid oxygen purged via the line 9 is introduced into a heat exchanger 10. In the embodiment shown in ~~figure~~ Figure 1, this exchanger 10 is located outside the cryogenic separation installation. It is made up of a tank 11 in the bottom of which oxygen-rich liquid 12 is deposited. The bottom of the tank 11 also contains a copper reboiler 13, the role of which is to boil off the oxygen contained in the bath 12. This copper reboiler 13 is, like the aluminum reboiler 6 of the cryogenic separation installation 1, supplied with gaseous nitrogen taken off from the medium-pressure column by means of a line 14. This gaseous nitrogen condenses in the copper reboiler 13, and a line 15 withdraws the nitrogen from the reboiler 13 and returns it to the medium-pressure column 2. A line 16 tapped off the top of the exchanger 10 returns the gaseous oxygen into the low-pressure column 3, while a line 17 purges a fraction of the liquid 12, this fraction therefore constituting the only amount of oxygen-rich liquid discharged from the entire installation.

7) Please replace the paragraph at page 9, line 10, with the following:

The size of the exchanger 10 and of the copper reboiler 13 that contains it depend tightly on the stream of oxygen-rich liquid 5 that they have to treat. The greater this stream, the larger the exchanger 10 and the reboiler 13 have to be. If the space available outside the column 1 is relatively limited, the exchanger 10 can only be small in size – under these conditions, the installation will be able to treat only a rather limited stream of oxygen-rich liquid 5. This type of installation, as shown in ~~figure~~ Figure 1, is therefore to be recommended more for cases in which the air treated by the cryogenic separation column 1 already has at the start a relatively high purity. Otherwise, it may be recommended to use an installation according to the invention as shown in ~~figure~~ Figure 2.

8) Please replace the paragraph at page 9, line 26, with the following:

In this example, the sump of the low-pressure column 3 is divided into two compartments by a partition 18 of height H. In the example shown, the partition 18 forms a corner, the first compartment 19 representing about three-quarters of the bottom of the low-pressure column 3 and the second compartment 20 representing the remaining quarter. At least one aluminum reboiler 20, 21 or 23 is installed in the first compartment 19 (or several of them, as in the example

shown), and at least one copper reboiler 24 is installed in the compartment 20. The height H of the partition 18 is calculated in such a way that the oxygen-rich liquid 5 present in the first compartment 19, when the low-pressure column 3 is operating in the steady state, spills over the top of the partition 18 so as to pass into the second compartment 20. This stream of liquid 5 flowing out of the first compartment 19 into the second compartment 20 therefore represents the purge stream of the oxygen-rich liquid. On entering the second compartment 20, the purged liquid forms a bath 5', which is treated by the copper reboiler 24. This treatment enriches the bath 5' with impurities. Since the reboiler 24 is made of copper, this impurity enrichment can be tolerated without prejudicing the safety operating conditions of the installation. A line 25 purges the liquid 5' rich in oxygen and in impurities present in the second compartment 20, in a manner similar to the line 17 of the first embodiment of the invention, shown in ~~figure~~ Figure 1.

- 9) Please insert the following paragraph at page 11, line 23:

It will be understood that many additional changes in the details, materials, steps and arrangement of parts, which have been herein described in order to explain the nature of the invention, may be made by those skilled in the art within the principle and scope of the invention as expressed in the appended claims. Thus, the present invention is not intended to be limited to the specific embodiments in the examples given above.

- 10) Please replace the subtitle at page 12, line 1, with the following text:
CLAIMS What is claimed is: